

**Department of Transportation  
Olympia, Washington 98504**

July 15, 2009

ATTENTION: All Bidders and Planholders

**I-5  
SR 501 RIDGEFIELD INTERCHANGE  
F.A. NO. HPP-0501(018),  
HPP-0501(019),  
ARRA-NH-0051(278)**

**Addendum No. 2**

**Special Provisions**

1. On page 125, the following is added after line 39:

The Contractor shall not haul through the downtown core the City of Ridgefield between the hours of 10:00 pm to 7:00 am Monday through Friday, 6:00 pm to 9:00 am during the weekends, and City holidays.

No hauling shall occur through downtown Ridgefield on the following community event days:

August 22, 2009 (Heritage Day)  
October 10-11, 2009 (BirdFest)  
December 5, 2009 (Hometown Celebration)  
July 4, 2010 (Fourth of July)  
August 28, 2010 (Heritage Day)  
October 9-10, 2010 (BirdFest)  
December 4, 2010 (Hometown Celebration)  
July 4, 2011 (Fourth of July)  
August 27, 2011 (Heritage Day)  
October 8-9, 2011 (BirdFest)  
December 3, 2011 (Hometown Celebration)

2. On page 127, lines 16 through 19 are deleted and replaced with the following:

**Northbound Off Ramp Construction**

The continuous closures of the outside northbound lane will be allowed for 75 calendar days, when the TCB Line is in use, during the construction of the northbound off-ramp (CB Line) and L501 Line, east of the bridge.

3. On page 136, line 45 is revised as follows:

furnishing, hauling, placing and compacting the asphalt concrete pavement for the haul road (SR501/Pioneer St., 3<sup>rd</sup> Avenue, Division St. as shown on the Vicinity Map)

4. On page 136, line 51 is revised as follows:

storage, relocation and restoration of existing landscaping at TIMM 15+50 LT to TIMM 23+00 LT.

5. On page 139, lines 19 through 21 are deleted.
6. On page 143, lines 26 and 27 are deleted and replaced with the following:

Pond excavation will be measured by the cubic yard.

Only one determination of the original ground elevation will be made on this project. Measurement for pond excavation and embankment will be based on the original ground elevations recorded previous to the award of this contract.

If discrepancies are discovered in the ground elevations which will materially affect the quantities of earthwork, the original computations of earthwork quantities will be adjusted accordingly.

Earthwork quantities will be computed, either manually or by means of electronic data processing equipment, by use of the average end area method or by the finite element analysis method utilizing digital terrain modeling techniques.

7. On page 154, line 13 is revised as follows:

Conc. Class 4000D                      ~~964~~1837 C.Y.

8. On page 179, line 2 is revised as follows:

The Contractor shall apply two ~~[(2)]~~ coats of graffiti resistant coating to the exposed surfaces

9. On page 179, line 4 is revised as follows:

recommendations, with the exception of the application rate, which shall be one ~~[(4)]~~ gallon

10. On page 179, line 25 is revised as follows:

has a minimum of three ~~[(3)]~~ years experience using the specified or a similar

11. On page 183, lines 18 and 19 are deleted.

12. On page 183, the following is added after line 26:

**DIVISION 7**  
**DRAINAGE STRUCTURES, STORM SEWERS,**  
**SANITARY SEWERS, WATER MAINS, AND CONDUITS**

13. On Page 185, lines 15 through 23 are deleted and replaced with the following:

“\_\_\_\_\_Media Filter Drain W/O Underdrain”, per linear foot.

“\_\_\_\_\_Media Filter Drain W/ Underdrain”, per linear foot.

The unit contract price per linear foot for “\_\_\_\_\_Media Filter Drain W/O Underdrain” and “\_\_\_\_\_Media Filter Drain W/ Underdrain” shall be full pay to furnish all labor, equipment and materials to construct the media filter drain, including excavation and disposal of excavated material, soil mix, media filter drain mix, and underdrain pipe, gravel backfill for drains, geotextile for underground drainage, underdrain and drain pipe, and crushed surfacing base course when required by the details in the Plans.

14. On page 192, the following is added after line 20:

**MANHOLES, INLETS, CATCH BASINS, AND DRYWELLS**

15. On page 211, the following is added after line 37:

For the Wetland Mitigation Site, the Seeding Fertilizing and Mulching, Seed Mix – Wetland shall be the same as Seed Mix – Water Quality described in the Special Provisions.

16. On page 223, lines 39 through 41 are revised as follows:

Federal Standard 595[B] Color [~~Number # FS~~] 30324, when dry as a target color admixture using manufacturer’s instructions for installation. Hardener coloring Federal Standard 595[B] Color [~~Number # FS~~] 36595, when dry as a target color and concrete pattern

17. On page 225, line 10 is revised as follows:

construct two [{2}] temporary illumination systems.

18. On page 228, the following is added after line 49:

(c) Decorative lighting poles shall be black.

19. On page 255, the following is added after line 6:

The Contractor shall remove the existing timber pole, ground plane, ground rods and associated conduits and conductors in the area of the existing HAR.

Voids resulting from the removal shall be backfilled with a granular material approved by the Engineer. The material shall be placed and compacted to the satisfaction of the Engineer.

Upon removal, the existing timber pole, ground plane, ground rods, conduits and conductors shall become property of the Contractor.

20. On page 278, the following is added after line 35:

|             |  |
|-------------|--|
| Appendix C: | Nationwide Permit 23, Terms and Conditions               |
| Appendix D: | Ridgefield School District, School Calendars 2009 – 2011 |
| Appendix E: | Non-Mandatory Waste Site                                 |

21. The following Special Provisions are added:

### **State Taxes**

(March 13, 1995)

The work on this contract is to be performed upon lands whose ownership obligates the Contractor to pay State sales tax on portions of the project work and obligates the Contractor to collect State sales tax from the Contracting Agency on other portions of the project as follows:

1. The provisions of Section 1-07.2(1) apply to the following listed portions of the project:

\*\*\* Groups 2 through 7 \*\*\*

2. The provisions of Section 1-07.2(2) apply to all of the remaining portions of the project.

For bidding purposes the Contracting Agency has segregated the plan quantities which are affected by Section 1-07.2(1) from those quantities affected by Section 1-07.2(2). These approximate quantities are shown on the Summary of Quantities sheets; however, any tax payments shall be based on actual quantities used.

### **STRUCTURAL EARTH WALLS**

#### **Materials**

Section 6-13.2 is supplemented with the following:

**(April 7, 2008)**

#### ***Precast Concrete Panel Faced Structural Earth Wall Materials***

##### **General Materials**

##### **Concrete Leveling Pad**

Leveling pad concrete shall be commercial concrete in accordance with Section 6-02.3(2)B.

##### **Backfill for Precast Concrete Panel Faced Structural Earth Wall**

All backfill material within the structural earth wall reinforced zone shall be free draining, free from organic or otherwise deleterious material.

Backfill material within the reinforced zone shall conform to Section 9-03.14(1), except that the maximum particle size for walls with geogrid reinforcement shall not exceed 1-1/4 inches.

All material within the structural earth wall reinforced zone shall be substantially free of shale or other soft, poor durability particles, and shall not contain recycled materials, such as glass, shredded tires, portland cement concrete rubble, or asphaltic concrete rubble. The material shall meet the following aggregate durability requirements:

| <b><u>Property</u></b> | <b><u>Test Method</u></b> | <b><u>Allowable Test Value</u></b> |
|------------------------|---------------------------|------------------------------------|
| Los Angeles Wear,      |                           | AASHTO T 9635 percent              |
| max.                   |                           |                                    |
| 500 rev.               |                           |                                    |
| Degradation            | WSDOT Test Method 11315   | percent min.                       |

For walls with metallic soil reinforcement, all material within the structural earth wall reinforced zone shall meet the following chemical requirements:

| <b><u>Property</u></b> | <b><u>Test Method</u></b>               | <b><u>Allowable Test Value</u></b> |
|------------------------|---|------------------------------------|
| Resistivity            | WSDOT Test Method 4173,000 ohm-cm, min. |                                    |
| pH                     | WSDOT Test Method 417                   | 5 to 10                            |
| Chlorides              | AASHTO T 291                            | 100 ppm max.                       |
| Sulfates               | AASHTO T 290                            | 200 ppm max.                       |

If the resistivity of the backfill material equals or exceeds 5,000 ohm-cm, the specified chloride and sulfate limits may be waived.

For walls with geogrid soil reinforcement, all material within the structural earth wall reinforced zone shall meet the following chemical requirements:

| <b><u>Property</u></b> | <b><u>Test Method</u></b> | <b><u>Allowable Test Value</u></b> |
|------------------------|---------------------------|------------------------------------|
| pH                     | WSDOT Test Method 417     | 4.5 to 9                           |

Wall backfill material satisfying these gradation, durability, and chemical requirements shall be classified as nonaggressive.

## **Proprietary Materials**

### **ARES Modular Panel Wall System**

#### **Tensor Geogrid Materials**

Geogrid reinforcement shall conform to Section 9-33.1, and shall be a product listed in Appendix D of the current WSDOT Qualified Products List (QPL). The values of  $T_{al}$  and  $T_{ult}$  as listed in the QPL for the products used shall meet or exceed the values required for the wall manufacturer's reinforcement design as specified in the structural earth wall design calculation and working drawing submittal.

The minimum ultimate tensile strength of the geogrid shall be a minimum average roll value (the average test results for any sampled roll in a lot shall meet or exceed the values shown in Appendix D of the current WSDOT QPL). The strength shall be determined in accordance with ASTM D 6637 for multi-rib specimens.

The ultraviolet (UV) radiation stability, in accordance with ASTM D 4355, shall be a minimum of 70 percent strength retained after 500 hours in the weatherometer.

The longitudinal (i.e., in the direction of loading) and transverse (i.e., parallel to the wall or slope face) ribs that make up the geogrid shall be perpendicular to one another. The maximum deviation of the cross-rib from being perpendicular to the longitudinal rib (skew) shall be no more than 1 inch in 5 feet of geogrid width. The maximum deviation of the cross-rib at any point from a line perpendicular to the longitudinal ribs located at the cross-rib (bow) shall be 0.5 inches.

The Engineer will take random samples of the geogrid materials at the job site. Approval of the geogrid materials will be based on testing of samples from each lot. A "lot" shall be defined as all geogrid rolls sent to the project site produced by the same manufacturer during a continuous period of production at the same manufacturing plant having the same product name. The Contracting Agency will require 14 calendar days maximum for testing the samples after their arrival at the WSDOT Materials Laboratory in Tumwater, WA.

The geogrid samples will be tested for conformance to the specified material properties. If the test results indicate that the geogrid lot does not meet the specified properties, the roll or rolls which were samples will be rejected. Two additional rolls for each roll tested which failed from the lot previously tested will then be selected at random by the Engineer for sampling and retesting. If the retesting shows that any of the additional rolls tested do not meet the specified properties, the entire lot will be rejected. If the test results from all the rolls retested meet the specified properties, the entire lot minus the roll(s) which failed will be accepted.

All geogrid materials which have defects, deterioration, or damage, as determined by the Engineer, will be rejected. All rejected geogrid materials shall be replaced at no expense to the Contracting Agency.

Except as otherwise noted, geogrid identification, storage and handling shall conform to the requirements specified in Section 2-12.2. The geogrid materials shall not be exposed to temperatures less than -20F and greater than 122F.

Rubber bearing pads shall be a type and grade as recommended by Tensar Earth Technologies, Inc.

Geosynthetic joint cover for all horizontal and vertical joints shall be a non-woven geosynthetic as recommended by Tensar Earth Technologies, Inc. Adhesive used to attach the geosynthetic to the rear of the precast concrete facing panel shall be as recommended by Tensar Earth Technologies, Inc.

#### **MSE Plus Wall**

Pins connecting the reinforcing mesh to the precast concrete panels shall conform to AASHTO M 32 and shall be galvanized in

accordance with AASHTO M 111. Damage to the galvanizing shall be repaired with one coat of Formula A-9-73 paint conforming to Section 9-08.2.

Bearing pads shall be serrated high-density polyethylene (HDPE) copolymer pads as recommended by SSL, LLC.

Filter fabric joint cover for all horizontal and vertical joints shall be non-woven geosynthetic conforming to AASHTO M 288. Adhesive used to attach the geosynthetic to the rear of the precast concrete facing panel shall be as recommended by SSL, LLC.

#### **Reinforced Earth Wall**

Reinforcing strips shall be shop fabricated from hot rolled steel conforming to ASTM A 572 Grade 65 or approved equal, and shall be galvanized after fabrication in accordance with AASHTO M 111. Damage to the galvanizing shall be repaired with one coat of Formula A-9-73 paint conforming to Section 9-08.2.

Bolts and nuts shall conform to Section 9-06.5(3), and shall be galvanized in accordance with AASHTO M 232.

Rubber bearing pads shall be a type and grade as recommended by the Reinforced Earth Company.

Vertical joint filler between panels, when specified in the structural earth wall working drawings, shall be two inch square, flexible open cell polyether foam strips, Grade UU-34, as recommended by the Reinforced Earth Company.

Filter fabric joint cover for all horizontal and vertical joints, when specified in the structural earth wall working drawings, shall be a pervious woven polypropylene filter fabric as recommended by the Reinforced Earth Company. Adhesive used to attach the fabric material to the rear of the precast concrete facing panel shall be as recommended by the Reinforced Earth Company.

#### **Reinforced Soil Wall**

Reinforcing mesh shall be shop fabricated of cold drawn steel wire conforming to AASHTO M 32, and shall be welded into finished mesh fabric conforming to AASHTO M 55. Reinforcing mesh shall be galvanized after fabrication in accordance with AASHTO M 111. Damage to the galvanizing shall be repaired with one coat of Formula A-9-73 paint conforming to Section 9-08.2.

#### **Retained Earth Wall**

Tie strips shall be shop fabricated from hot rolled steel conforming to ASTM A 570 Grade 50 or approved equal, and shall be galvanized after fabrication in accordance with AASHTO M 111. Damage to the galvanizing shall be repaired with one coat of Formula A-9-73 paint conforming to Section 9-08.2.

The embed loops and connector bars shall be fabricated of steel wire conforming to AASHTO M 32, and shall be galvanized after fabrication in accordance with AASHTO M 111.

Filter fabric joint cover for all horizontal and inclined joints shall be a monofilament filter fabric as recommended by Foster Geotechnical. Adhesive used to attach the fabric to the rear of the precast concrete facing panel shall be as recommended by Foster Geotechnical.

**(April 2, 2007)**

### ***Concrete Block Faced Structural Earth Wall Materials***

#### **General Materials**

##### **Concrete Block**

Acceptability of the blocks will be determined based on the following:

1. Visual inspection.
2. Compressive strength tests, conforming to Section 6-13.3(4).
3. Water absorption tests, conforming to Section 6-13.3(4).
4. Manufacturer's Certificate of Compliance in accordance with Section 1-06.3.
5. Freeze-thaw tests conducted on the lot of blocks produced for use in this project, as specified in Section 6-13.3(4).
6. Copies of results from tests conducted on the lot of blocks produced for this project by the concrete block fabricator in accordance with the quality control program required by the structural earth wall manufacturer.

The blocks shall be considered acceptable regardless of curing age when compressive test results indicate that the compressive strength conforms to the 28-day requirements, and when all other acceptability requirements specified above are met.

Testing and inspection of dry cast concrete blocks shall conform to ASTM C 140, and shall include block fabrication plant approval by WSDOT prior to the start of block production for this project.

##### **Mortar**

Mortar shall conform to ASTM C 270, Type S, with an integral water repellent admixture as approved by the Engineer. The amount of admixture shall be as recommended by the admixture manufacturer. To ensure uniform color, texture, and quality, all mortar mix components shall be obtained from one manufacturer for each component, and from one source and producer for each aggregate.



### **Drainage Geosynthetic Fabric**

Drainage geosynthetic fabric shall be a non-woven geosynthetic conforming to the requirements in Section 9-33.1, for Construction Geotextile for Underground Drainage, Moderate Survivability, Class B.

### **Backfill for Concrete Block Faced Structural Earth Wall**

All backfill material within the structural earth wall reinforced zone shall be free draining, free from organic or otherwise deleterious material.

Backfill material within the reinforced zone shall conform to Section 9-03.14(1), except that the maximum particle size for walls with geogrid reinforcement shall not exceed 1-1/4 inches.

All material within the structural earth wall reinforced zone shall be substantially free of shale or other soft, poor durability particles, and shall not contain recycled materials, such as glass, shredded tires, portland cement concrete rubble, or asphaltic concrete rubble. The material shall meet the following aggregate durability requirements:

| <b><u>Property</u></b> | <b><u>Test Method</u></b> | <b><u>Allowable Test Value</u></b> |
|------------------------|---------------------------|------------------------------------|
| Los Angeles Wear,      |                           | AASHTO T 9635 percent              |
| max.                   |                           |                                    |
| 500 rev.               |                           |                                    |
| Degradation            | WSDOT Test Method 11315   | percent min.                       |

For walls with metallic soil reinforcement, all material within the structural earth wall reinforced zone shall meet the following chemical requirements:

| <b><u>Property</u></b> | <b><u>Test Method</u></b> | <b><u>Allowable Test Value</u></b> |
|------------------------|---------------------------|------------------------------------|
| Resistivity            | WSDOT Test Method 417     | 3,000 ohm-cm, min.                 |
| pH                     | WSDOT Test Method 417     | 5 to 10                            |
| Chlorides              | AASHTO T 291              | 100 ppm max.                       |
| Sulfates               | AASHTO T 290              | 200 ppm max.                       |

If the resistivity of the backfill material equals or exceeds 5,000 ohm-cm, the specified chloride and sulfate limits may be waived.

For walls with geogrid soil reinforcement, all material within the structural earth wall reinforced zone shall meet the following chemical requirements:

| <b><u>Property</u></b> | <b><u>Test Method</u></b> | <b><u>Allowable Test Value</u></b> |
|------------------------|---------------------------|------------------------------------|
| pH                     | WSDOT Test Method 417     | 4.5 to 9                           |

Wall backfill material satisfying these gradation, durability, and chemical requirements shall be classified as nonaggressive.

## **Proprietary Materials**

### **KeySystem I Wall**

Reinforcing strips shall be composed of welded wire fabric strips conforming to AASHTO M 55 with wire conforming to AASHTO M 32, and attached to block connector plates conforming to ASTM A 36. Reinforcing strips and block connector plates shall be galvanized after fabrication in accordance with AASHTO M 111. Damage to galvanizing shall be repaired with one coat of Formula A-9-73 paint conforming to Section 9-08.2.

Block alignment pins shall be fiberglass conforming to the requirements of Keystone Retaining Wall Systems, Inc.

Block connector pins shall conform to AASHTO M 32, and shall be galvanized after fabrication in accordance with AASHTO M 111.

### **Mesa Wall**

#### **Tensar Geogrid Materials**

Geogrid reinforcement shall conform to Section 9-33.1, and shall be a product listed in Appendix D of the current WSDOT Qualified Products List (QPL). The values of  $T_{al}$  and  $T_{ult}$  as listed in the QPL for the products used shall meet or exceed the values required for the wall manufacturer's reinforcement design as specified in the structural earth wall design calculation and working drawing submittal.

The minimum ultimate tensile strength of the geogrid shall be a minimum average roll value (the average test results for any sampled roll in a lot shall meet or exceed the values shown in Appendix D of the current WSDOT QPL). The strength shall be determined in accordance with ASTM D 6637, for multi-rib specimens.

The ultraviolet (UV) radiation stability, in accordance with ASTM D 4355, shall be a minimum of 70 percent strength retained after 500 hours in the weatherometer.

The longitudinal (i.e., in the direction of loading) and transverse (i.e., parallel to the wall or slope face) ribs that make up the geogrid shall be perpendicular to one another. The maximum deviation of the cross-rib from being perpendicular to the longitudinal rib (skew) shall be no more than 1 inch in 5 feet of geogrid width. The maximum deviation of the cross-rib at any point from a line perpendicular to the longitudinal ribs located at the cross-rib (bow) shall be 0.5 inches.

The gap between the connector and the bearing surface of the connector tab cross-rib shall not exceed 0.5 inches. A maximum of 10% of connector tabs may have a gap between 0.3 inches and 0.5 inches. Gaps in the remaining connector tabs shall not exceed 0.3 inches.

The Engineer will take random samples of the geogrid materials at the job site. Approval of the geogrid materials will be based on testing of samples from each lot. A “lot” shall be defined as all geogrid rolls sent to the project site produced by the same manufacturer during a continuous period of production at the same manufacturing plant having the same product name. The Contracting Agency will require 14 calendar days maximum for testing the samples after their arrival at the WSDOT Materials Laboratory in Tumwater, WA.

The geogrid samples will be tested for conformance to the specified material properties. If the test results indicate that the geogrid lot does not meet the specified properties, the roll or rolls which were samples will be rejected. Two additional rolls for each roll tested which failed from the lot previously tested will then be selected at random by the Engineer for sampling and retesting. If the retesting shows that any of the additional rolls tested do not meet the specified properties, the entire lot will be rejected. If the test results from all the rolls retested meet the specified properties, the entire lot minus the roll(s) which failed will be accepted.

All geogrid materials which have defects, deterioration, or damage, as determined by the Engineer, will be rejected. All rejected geogrid materials shall be replaced at no expense to the Contracting Agency.

Except as otherwise noted, geogrid identification, storage and handling shall conform to the requirements specified in Section 2-12.2. The geogrid materials shall not be exposed to temperatures less than –20F and greater than 122F.

Block connectors for block courses with geogrid reinforcement shall be glass fiber reinforced high-density polypropylene conforming to the following minimum material specifications:

| <u>Property</u>    | <u>Specification</u>    | <u>Value</u>               |
|--------------------|-------------------------|----------------------------|
| Polypropylene      | ASTM D 4101             |                            |
|                    | Group 1 Class 1 Grade 2 | 73 ± 2 percent             |
| Fiberglass Content |                         | ASTM D 2584 25 ± 3 percent |
| Carbon Black       | ASTM D 4218             | 2 percent minimum          |
| Specific Gravity   | ASTM D 792              | 1.08 ± 0.04                |
| Tensile Strength   | ASTM D 638              |                            |
| at yield           |                         | 8,700 ± 1,450 psi          |
| Melt Flow Rate     | ASTM D 1238             | 0.37 ± 0.16 ounces/10 min. |

Block connectors for block courses without geogrid reinforcement shall be glass fiber reinforced high-density polyethylene (HDPE) conforming to the following minimum material specifications:

| <u>Property</u> | <u>Specification</u> | <u>Value</u> |
|-----------------|----------------------|--------------|
| HDPE            | ASTM D 1248          |              |

|                          |                |                            |
|--------------------------|----------------|----------------------------|
| Type III Class A Grade 5 | 68 ± 3 percent |                            |
| Fiberglass Content       | ASTM D 2584    | 30 ± 3                     |
| percent                  |                |                            |
| Carbon Black             | ASTM D 4218    | 2 percent minimum          |
| Specific Gravity         | ASTM D 792     | 1.16 ± 0.06                |
| Tensile Strength         | ASTM D 638     |                            |
| at yield                 |                | 8,700 ± 725 psi            |
| Melt Flow Rate           | ASTM D 1238    | 0.11 ± 0.07 ounces/10 min. |

## Construction Requirements

Section 6-13.3 is supplemented with the following:

**(April 4, 2005)**

### ***Precast Concrete Panel Faced Structural Earth Wall***

Precast concrete panel faced structural earth walls shall be constructed of only one of the following wall systems. The Contractor shall make arrangements to purchase the precast concrete panels, soil reinforcement, attachment devices, joint filler, and all necessary incidentals from the source identified with each wall system:

#### ARES Modular Panel Wall System

ARES Modular Panel Wall System is a registered trademark of Tensar Earth Technologies, Inc.

Tensar Earth Technologies, Inc.  
5883 Glenridge Drive Suite 200  
Atlanta, GA 30328  
(800) 836-7271

#### MSE Plus Wall

MSE Plus is a registered trademark of SSL, LLC.

SSL, LLC  
4740-Suite E Scotts Valley Drive  
Scotts Valley, CA 95066  
(831) 430-9300  
FAX (831) 430-9340

#### Reinforced Earth Wall

Reinforced Earth is a registered trademark of the Reinforced Earth Company.

The Reinforced Earth Company  
1 Orchard Road Suite 220  
Lake Forest CA, 92630  
(949) 587-3060

#### Reinforced Soil Wall

Reinforced Soil is a registered trademark of Hilfiker Retaining Walls.

Hilfiker Retaining Walls

P. O. Box 2012  
Eureka, CA 95501-2012  
(707) 443-5093  
FAX (707) 443-2891

#### Retained Earth Wall

Retained Earth is a registered trademark of Foster Geotechnical.

Foster Geotechnical  
1660 Hotel Circle North Suite 304  
San Diego, CA 92108  
(619) 688-2400  
FAX (619) 688-2499

**(April 5, 2004)**

#### **Concrete Block Faced Structural Earth Wall**

Concrete block faced structural earth walls shall be constructed of only one of the following wall systems. The Contractor shall make arrangements to purchase the concrete blocks, soil reinforcement, attachment devices, joint filler, and all necessary incidentals from the source identified with each wall system:

#### Mesa Wall

Mesa Wall is a registered trademark of Tensar Earth Technologies, Inc.

Tensar Earth Technologies, Inc.  
5883 Glenridge Drive Suite 200  
Atlanta, GA 30328  
(800) 836-7271

#### KeySystem I Wall

KeySystem I is a registered trademark of Keystone Retaining Wall Systems, Inc.

Keystone Retaining Wall Systems, Inc.  
2061 NW Aloclek Drive Suite 907  
Hillsboro, OR 97214  
(800) 733-7470  
(FAX (503) 439-8592

#### **Submittals**

Section 6-13.3(2) is supplemented with the following:

(April 5, 2004)

The following geotechnical design parameters shall be used for the design of the structural earth wall(s):

Wall Name or No.: \*\*\* Structural Earth Wall 1 and Structural Earth Wall 2 \*\*\*

| Soil | Wall | Retained | Foundation |
|------|------|----------|------------|
|------|------|----------|------------|

| Properties                          | Backfill               | Soil                     | Soil          |
|-------------------------------------|------------------------|--------------------------|---------------|
| Unit Weight<br>(pcf)                | *** 125 ***            | *** 110 ***              | *** 110 ***   |
| Friction Angle<br>(deg)             | *** 34 ***             | *** 0 ***                | *** 0 ***     |
| Cohesion (psf)                      | *** 0 ***              | *** 1,500 ***            | *** 1,500 *** |
|                                     | AASHTO<br>Load Group I | AASHTO<br>Load Group VII |               |
| Allowable Bearing<br>Capacity (tsf) | ***1.5***              | ***1.5***                |               |
| Acceleration Coefficient (g)        | N/A                    | ***0.19***               |               |

### ***Precast Concrete Facing Panel and Concrete Block Fabrication***

Section 6-13.3(4) is supplemented with the following:

**(April 7, 2008)**

#### **Specific Fabrication Requirements for Precast Concrete Panel Faced Structural Earth Walls**

##### **ARES Modular Panel Wall System**

The concrete mix for precast concrete facing panels shall be a Contractor mix design in accordance with Section 6-02.3(2)A, producing a minimum compressive strength at 28 days of 4,500 psi. The Contractor mix design for precast concrete facing panels shall not include Type III cement unless otherwise approved by the Engineer.

The slot opening for geogrid attachment in precast concrete facing panels shall be 1/8 inch minimum. The Contractor shall test the slot opening of each concrete panel using a feeler gauge furnished by Tensar Earth Technologies, Inc. Concrete panels with slot dimension deviations that allow the feeler gauge to be pulled out of the slot shall be rejected.

##### **MSE Plus Wall**

The concrete mix for precast concrete facing panels shall be a Contractor mix design in accordance with Section 6-02.3(2)A producing a minimum compressive strength at 28 days of 4000 psi, except that precast concrete facing panels using soil reinforcement mesh of either 6w20 or 6w24 shall be a Contractor mix design in accordance with Section 6-02.3(2)A, producing a minimum compressive strength at 28 days of 5,000 psi.

Rods forming the internal connection channel in precast concrete facing panels shall be turned within 20 minutes of concrete placement in each concrete panel, and removed between 3 and 24 hours after concrete placement.

### ***Precast Concrete Facing Panel and Concrete Block Erection***

Section 6-13.3(5) is supplemented with the following:

**(April 5, 2004)**

**Specific Erection Requirements for Precast Concrete Panel Faced Structural Earth Walls**

**MSE Plus Wall**

The loop pockets and access pockets of the internal connection channel of the precast concrete facing panels shall be cleaned of all backfill and extraneous materials prior to inserting the pins to connect the soil reinforcing mesh to each concrete panel.

**(April 5, 2004)**

**Specific Erection Requirements for Precast Concrete Block Faced Structural Earth Walls**

**Mesa Wall**

For all concrete block courses receiving geogrid reinforcement, the fingers of the block connectors shall engage the geogrid reinforcement apertures, both in the connector slot in the block, and across the block core. For all concrete block courses with intermittent geogrid coverage, a #3 steel reinforcing bar shall be placed, butt end to butt end, in the top block groove, with the butt ends being placed at a center of a concrete block.

***Backfill***

Section 6-13.3(7) is supplemented with the following:

**(April 5, 2004)**

**Specific Backfill Requirements for Precast Concrete Panel Faced Structural Earth Walls**

**MSE Plus Wall**

At each wall reinforcement level, the Contractor shall place the backfill to the level of the connection. Backfill placement and compaction methods shall ensure that no voids exist directly beneath the wall reinforcement near the precast concrete facing panels.

**RELOCATION OF FIRE SUPPRESSANT STANDPIPE**

**Construction Requirements**

Where shown on the Plans, stand pipe shall be installed in accordance with Section 7-14.

**Payment**

“Relocate Stand Pipe”, per each.

The unit Contract price per each for “Relocate Stand Pipe” shall be full pay for all Work to move the existing stand pipe, including any lateral tee, shackling, painting, and reconnecting to the main. New pipe for stand pipe connections will be paid for as specified in Section 7-09.5.

## **DETECTABLE WARNING PATTERN**

### **Description**

This work consists of furnishing and installing detectable warning patterns in accordance with the details shown in the Standard Plans and in conformity with the Plans or as established by the Engineer.

### **Construction Requirements**

Where shown in the plans, the Contractor shall install a detectable warning pattern having the truncated dome shape shown in the Standard Plans.

The Contractor shall use one of the detectable warning pattern products listed in the Qualified Products List or submit another manufacturer's product for approval by the Engineer. The warning pattern shall be capable of being bonded to a hot mix asphalt surface. The surface of the warning pattern, excluding domes, shall not be more than 3/8-inch above the surface of the concrete after installation. Shall have the truncated dome shape as specified in Standard Plan F-3a.

### **Measurement**

Detectable Warning Pattern on HMA will be measured by the square foot of truncated dome material installed on HMA.

### **Payment**

Payment will be made in accordance with Section 1-04.1, for the following bid items:

"Detectable Warning Pattern", per square foot.

## **Non-Mandatory Waste Site**

The Contracting Agency has provided a Non-Mandatory Waste Site, which is shown in Appendix E. For additional information regarding this site contact the Port of Ridgefield:

Randy Mueller  
(360) 887-3873  
PO Box 55  
Ridgefield, WA 98642

If the Contractor chooses to use the Non-Mandatory Waste Site, the Contractor shall provide unit bid prices for the various bid items set up for payment at the Non-Mandatory Waste Site.

Silt Fence – Site

Tire Wash – Site

Seeding, Fertilizing and Mulching - Site



The silt fence, tire wash, and seeding, fertilizing and mulching at the Non-Mandatory Waste Site shall be constructed per Section 8-01 of the Standard Specifications and the special provisions.

The seeding, fertilizing and mulching mix for the Non-Mandatory Waste Site shall be as described in the special provisions under Seed Mix – Roadside.

Section 8-01.5 Payment shall be supplemented with the following:

“Tire Wash – Site”, per each  
“Silt Fence – Site”, per linear foot  
“Seeding, Fertilizing and Mulching – Site” per acre

The Non-Mandatory Waste Site allows the Contractor the option to stockpile excavated material from the Project at the Site. All costs excluding the bid items listed in this special provision associated with stockpiling the excavated material from the Project at the Site shall be included in the various unit contract prices for excavation. Clearing and grubbing debris, asphalt concrete pavement, concrete and portland cement concrete pavement shall not be disposed of at the Non-Mandatory Waste Site.

### **Hauling to the Non-Mandatory Waste Site (Port of Ridgefield)**

The haul route to the Non-Mandatory Waste Site is on the following roads/city streets within the City of Ridgefield: SR 501/Pioneer Street, N. 3<sup>rd</sup> Avenue, Division Street

The Contractor shall not haul on SR 501/Pioneer Street in the vicinity of View Ridge Middle School, when school is in session, during the following hours.

Regular school days:  
7:00 am to 8:30 am  
2:00 pm to 3:15 pm

Early Release school days:  
7:00 am to 8:30 am  
11:00 am to 12:15 pm

Appendix D shows the Ridgefield School District’s schedule during the 2009-2010 and 2010-2011 school years. In the 2009-2010 school year there are 13 Early Release dates. The Contractor shall be responsible for contacting the Ridgefield School District for 2010-2011 school year Early Release dates, and for the 2011-2012 school year schedule. The Contractor shall check with the Ridgefield School District for any changes to the

schedule, and shall adjust their hauling schedule to the Non-Mandatory Waste Site, accordingly.

The Contractor shall not use Unmuffled Compression Brakes within the Ridgefield City limits.

## **Plans**

1. Plan sheets 2, 4 - 15, 17, 19, 20, 23, 26, 33, 35, 40, 49, 51, 52, 73, 75, 76, 102, 103, 105 – 109, 129 - 144, 147, 148, 150, 153 - 155, 162, 186, 197, 198, 203 - 210, 214 – 218, 223, 228 – 232, 234 – 240, 244, 248, 322 , 324 - 328, 360, 361, 384 are revised and noted on the attached sheets.
2. Plan sheets 121 – 128 are replaced in their entirety.
3. Plan sheet 360A is added.
4. Plan sheets MG1.0, MG2.0, MG2.1 are added.

## **Proposal**

1. Page 1, item No.s 3, 4 the PLAN QUANTITY is revised.
2. Page 2, item No.s 13, 17, 21, 22 the PLAN QUANTITY is revised.
3. Page 3, item No.s 23, 29, 32, 33 the PLAN QUANTITY is revised.
4. Page 3, item No.s 27, 28, 34 are revised in their entirety.
5. Page 3, item No. 35 is deleted.
6. Page 4, item No.s 36, 37, 38 the PLAN QUANTITY is revised.
7. Page 5, item No. 51 the PLAN QUANTITY is revised.
8. Page 7, item No. 87 the PLAN QUANTITY is revised.
9. Page 7, item No.s 79, 86 is deleted.
10. Page 7, item No.s 82, 83 are revised in their entirety.
11. Page 8, item No.s 97, 98 the PLAN QUANTITY is revised.
12. Page 9, item No.s 100, 101, 102, 112 the PLAN QUANTITY is revised.
13. Page 9, item No. 107 the ITEM DESCRIPTION is revised.
14. Page 10, item No.s 114, 117, 126 the PLAN QUANTITY is revised.
15. Page 10, item No. 127 the ITEM DESCRIPTION and PLAN QUANTITY are revised.
16. Page 10, item No. 125 the ITEM DESCRIPTION is revised.
17. Page 11, item No.s 128 - 131, 133, 136, 138, 140 the PLAN QUANTITY is revised.
18. Page 12, item No.s 145, 146 the PLAN QUANTITY is revised.
19. Page 12, item No. 148 is deleted.
20. Page 13, item No.s 155, 156, 158, 165 the PLAN QUANTITY is revised.
21. Page 14, item No. 181 is revised in its entirety.
22. Page 16, item No.s 197, 198 the PLAN QUANTITY is revised.
23. Page 17, item No. 210 the PLAN QUANTITY is revised.
24. Page 18, item No. 227 the PLAN QUANTITY is revised.
25. Page 18, item No. 233 is deleted.
26. Page 18, item No.s 235, 236, 237 are added.
27. Page 19, item No.s 238 – 251 are added.
28. Page 20, item No.s 252 – 259 are added.

## **Wage Rates**

1. Page 41 of the Federal Wage Rates WA080001, Modification 27 is deleted and replaced with the attached page 41 WA080001, Modification 28.
2. Pages 1, 8 and 29 of the Federal Wage Rates WA080001, Modification 27 are deleted and replaced with the attached pages 1, 8 and 29 WA080001, Modification 29.

Bidders shall furnish the Secretary of Transportation with evidence of receipt of this Addendum. This Addendum will be incorporated in the contract when awarded and when formally executed.

**Donald R. Wagner, P.E.**  
**Regional Administrator**

### Attachment:

Sheet 360A of the Plans

Sheets 4 - 15 of the Plans (Rev. 6/24/2009)

Sheets 2, 19, 23, 33, 35, 228, 229, 238 - 240 of the Plans (Rev. 6/30/2009)

Sheets 360, 361 of the Plans (Rev. 7/1/2009)

Sheets 322, 324 - 328 of the Plans (Rev. 7/7/2009)

Sheet 102 of the Plans (Rev. 7/8/2009)

Sheets 17, 20, 26, 40, 49, 51, 52, 73, 75, 76, 103, 105 - 109, 121- 144, 147, 148, 150, 153 - 155, 162, 214 - 218, 223, 230 - 232, 234, 235 - 237, 244, 248, 384 of the Plans (Rev. 7/9/2009)

Sheets 186, 197, 198, 203 - 210 of the Plans (Rev. 7/1/09)

Pages 1 - 5, 7 - 14, 16 - 20 of the Proposal (Rev. 6/24/2009)

Page 41 of the Wage Rates; WA080001, Modification 28

Pages 1, 8 and 29 of the Wage Rates; WA080001, Modification 29

Pages 1 - 14, Nationwide Permit 23 Terms and Conditions (Effective Date September 10, 2007)

Page 1, RIDGEFIELD SCHOOL DISTRICT, School Calendar, 2009-2010 (Rev. 5-26-09)

Page 1, RIDGEFIELD SCHOOL DISTRICT, School Calendar, 2010-2011 (Approved 5-26-09)

Sheets MG1.0, MG2.0, MG2.1 (Rev. 7/9/2009)